इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

"जानने का अधिकार, जीने का अधिकार"
Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

IS 1934 (1982): Sesamum Oilcake as Livestock Feed Ingredient [FAD 5: Livestock Feeds, Equipment and Systems]

"ज्ञान से एक नये भारत का निर्माण"
Satyanarayan Gangaram Pitroda
"Invent a New India Using Knowledge"

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

"ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है"
Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

IS : 1934 - 1982

REAFFIRMED

[illegible] 2009

Indian Standard
SPECIFICATION FOR SESAMUM OILCAKE AS LIVESTOCK FEED INGREDIENT
(First Revision)

UDC 665·117·2 633·853·74 : 636·087·26

© *Copyright* 1982

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Price Rs 5·00 *June* 1982

Indian Standard

SPECIFICATION FOR SESAMUM OILCAKE AS LIVESTOCK FEED INGREDIENT

(First Revision)

Animal Feeds Sectional Committee, AFDC 15

Chairman	*Representing*
Dr O. N. Singh	Ministry of Agriculture (Department of Food), New Delhi
Members	
Agricultural Marketing Adviser to the Government of India	Directorate of Marketing & Inspection (Ministry of Agriculture)
Dr G. Gopala Rao (*Alternate*)	
Dr S. L. Anaokar	Godrej Soaps Limited, Bombay
Dr G. F. Mithuji (*Alternate*)	
Dr S. P. Arora	Indian Council of Agricultural Research, New Delhi
Dr C. S. Barsaul	CSA University of Agriculture & Technology, Mathura
Dr K. M. Sharma (*Alternate*)	
Shri M. K. Dattaraj	Roller Flour Millers' Federation of India, New Delhi
Shri K. B. Thiagarajan (*Alternate*)	
Dr A. N. Ghosh	Animal Husbandry Commissioner (Ministry of Agriculture)
Shri S. S. Chhibber (*Alternate*)	
Dr S. S. Gill	Punjab Agricultural University, Ludhiana
Dr N. S. Godrej	The Compound Livestock Feeds Manufacturers' Association of India, Bombay
Shri Vineet Virmani (*Alternate*)	
Dr Gopal Krishan	Haryana Agricultural University, Hissar
Dr M. G. Jackson	GB Pant University of Agriculture & Technology, Pantnagar
Dr M. L. Verma (*Alternate*)	
Dr Krishan Kumar	Directorate General of Technical Development, New Delhi
Shri B. Lakshmanan	Shaw Wallace & Company Limited, Calcutta

(*Continued on page* 2)

© *Copyright* 1982
INDIAN STANDARDS INSTITUTION
This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

(*Continued from page* 1)

Members	*Representing*
Dr V. D. Mudgal	National Dairy Research Institute (ICAR), Karnal
Dr B. N. Gupta (*Alternate*)	
Dr M. J. Mulky	Hindustan Lever Limited, Bombay
Dr D. V. R. Parkash Rao	LVR Feeds & Minerals Pvt Ltd, Madras
Shri L. R. Sivaprasad (*Alternate*)	
Dr S. M. Patel	All India Cottonseed Crushers' Association, Bombay
Shri K. M. Pai (*Alternate*)	
Dr D. V. Raonekar	Bhartiya Agro-Industries Foundation, Uruli Kanchan (Pune)
Dr A. L. Joshi (*Alternate*)	
Dr N. S. Rajagopal	Directorate of Vanaspati, Vegetable Oils & Fats (Ministry of Agriculture)
Dr V. R. Sadagopan	Central Avian Research Institute (ICAR), Izatnagar
Dr (Mrs) C. K. Sarojini	Kaira District Co-operative Milk Producers' Union Limited, Anand
Dr N. Satapathy	The Tata Oil Mills Company Limited, Bombay
Dr S. S. Chhabra (*Alternate*)	
Brig A. S. Sekhon	Directorate of Military Farms, Army Headquarters (Ministry of Defence)
Shri R. K. Tripathi (*Alternate*)	
Dr P. C. Shukla	Institute of Agriculture, Gujarat Agriculture University, Anand
Dr U. B. Singh	Indian Veterinary Research Institute (ICAR), Izatnagar
Dr D. C. Joshi (*Alternate*)	
Shri G. V. Sirur	Solvent Extractors' Association of India, Bombay
Shri T. S. Tambolia	The Maharashtra Agro-Industries Development Corporation Limited, Bombay
Dr S. M. Sonalkar (*Alternate*)	
Shri Vineet Virmani	Jawala Flour Mills, New Delhi
Shri Anand Virmani (*Alternate*)	
Shri T. Purnanandam, Director (Agri & Food)	Director General, ISI (*Ex-officio Member*)

Secretary

Shri Lajinder Singh
Deputy Director (Agri & Food), ISI

Subcommittee for Oilcakes as Livestock Feed, AFDC 15 : 3

Convener	
Dr V. D. Mudgal	National Dairy Research Institute (ICAR), Karnal
Members	
Agricultural Marketing Adviser to the Government of India	Directorate of Marketing & Inspection (Ministry of Agriculture)
Dr G. Gopala Rao (*Alternate*)	
Shri R. V. Bijur	All India Cottonseed Crushers' Association, Bombay
Shri K. M. Pai (*Alternate*)	

(*Continued on page* 7)

(*Continued from page* 2)

Members	*Representing*
Shri O. P. Goenka	Solvent Extractors' Association of India, Bombay
Shri R. P. Khosla (*Alternate*)	
Dr D. C. Joshi	Indian Veterinary Research Institute (ICAR), Izatnagar
Dr S. S. Negi (*Alternate*)	
Col R. K. Kochhar	Directorate of Supplies and Transport (Ministry of Defence)
Lt-Col P. J. Cherian (*Alternate*)	
Shri V. Krishnamoorthi	Regional Research Laboratory (CSIR), Hyderabad
Shri B. Lakshmanan	Shaw Wallace & Company Limited, Calcutta
Dr N. Satapathy	The Tata Oil Mills Company Limited, Bombay
Dr S. S. Chhabra (*Alternate*)	
Brig A. S. Sekhon	Directorate of Military Farms, Army Headquarters (Ministry of Defence)
Shri R. K. Tripathi (*Alternate*)	
Dr P. C. Shukla	Institute of Agriculture, Gujarat Agriculture University, Anand
Brig S. N. Srivastava	Directorate of Remounts and Veterinary Services, Army Headquarters (Ministry of Defence)
Shri N. Subramanian	Central Food Technological Research Institute (CSIR), Mysore
Dr M. A. Haleem (*Alternate*)	
Dr S. Yamdagni	Hindustan Lever Limited, Bombay

AMENDMENT NO. 1 OCTOBER 1995
TO
IS 1934 : 1982 SPECIFICATION FOR SESAMUM OILCAKE AS LIVESTOCK FEED INGREDIENT

(First Revision)

(*Page* 6, *clause* 7.2, *line* 2) — Substitute 'IS 1070 : 1992†' *for* 'IS : 1070 - 1977†'.

(*Page* 6, *foot-note with* '†' *mark*) — Substitute 'Reagent grade water (*third revision*)' for the existing foot-note.

(FAD 5)

Reprography Unit, BIS, New Delhi, India

Indian Standard

SPECIFICATION FOR SESAMUM OILCAKE AS LIVESTOCK FEED INGREDIENT

(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 30 April 1982, after the draft finalized by the Animal Feeds Sectional Committee had been approved by the Agricultural and Food Products Division Council.

0.2 The oilcake derived from Sesamum (*sesamum indicum* Linn.) or gingelly oilcake is a feed of high nutritive value. The formulation of this standard was undertaken by the Animal Feeds Sectional Committee in accordance with the programme for the preparation of Indian Standards for the various ingredients used in compounding feed mixtures. At the same time, the need for the speedy formulation of standard for oilseed cakes was emphasized by the Indian Central Oilseeds Committee and the Directorate of Marketing and Inspection, Ministry of Food and Agriculture, Government of India. It is expected that this standard will assist in the development of the mixed feeds industry in the country. Inclusion of the aflatoxin limit in the standard did not find favour with the committee at this stage because of the non-availability of a reliable and quick method for its determination. Further, data for fixing safe limit in the product meant for livestock feed was also not available. However, it was a considered view of the committee to fix this limit as early as possible.

0.3 This standard was first published in 1961. The Committee in the present revision took note of the latest development in the manufacturing, trading, storing and consumption pattern of the product and accordingly the requirements have been modified. Opportunity has also been taken to align the test methods for various requirements to IS : 7874 (Part I)-1975*.

---

*Methods of tests for animal feeds and feeding stuffs : Part I General methods.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for sesamum oilcake for use as livestock feed ingredient.

1.2 This standard does not cover the solvent-extracted sesamum oilcake meant for livestock as feed ingredient.

2. TYPES

2.1 The material shall be of the following two types:

a) *Expeller, Hydraulic or Rotary Pressed Oilcake* — shall be the product obtained after the expression of oil from sesamum seeds by the expeller or hydraulic or rotary method.

b) *Ghani Pressed Oilcake* — shall be the product obtained after the expression of oil from sesamum seeds by the animal-driven *ghani*.

3. GRADES

3.1 There shall be two grades, namely, Grade HF (High Fat) and Grade LF (Low Fat) for the expeller, hydraulic or rotary pressed oilcake only.

4. REQUIREMENTS

4.1 Description — The material shall be free from harmful constituents castor oilcake, husk and mahua oilcake. It shall be free from rancidity, adulterants, insect or visible fungus infestation and from fermented, musty or other objectionable odours. It shall also be free from dirt and other extraneous matter including iron or other metallic pieces.

4.2 The material shall also conform to the requirements prescribed in Table 1.

---

*Rules for rounding off numerical values (*revised*).

TABLE 1 REQUIREMENTS FOR SESAMUM (*TIL*) OILCAKE AS LIVESTOCK FEED INGREDIENT

(*Clause* 4.2)

SL No.	CHARACTERISTIC	EXPELLER, HYDRAULIC OR ROTARY PRESSED OILCAKE		GHANI PRESSED OILCAKE	METHOD OF TEST, REF TO CL No. OF IS : 7874-(PART I) 1975*
		Grade HF	Grade LF		
(1)	(2)	(3)	(4)	(5)	(6)
i)	Moisture, percent by mass, *Max*	8·0	8·0	8·0	4
ii)	Crude protein (N × 6·25) percent by mass, *Min*	40·0	42·0	36·0	5
iii)	Crude fat or ether extract, percent by mass, *Min*	8·0	5·0	14·0	7
iv)	Crude fibre, percent by mass, *Max*	7·0	7·0	7·0	8
v)	Total ash, percent by mass, *Max*	13·0	13·0	13·0	9
vi)	Acid insoluble ash, percent by mass, *Max*	1·5	2·0	2·0	10
vii)	Castor husk or oilcake	Nil	Nil	Nil	11
viii)	Mahua oilcake	Nil	Nil	Nil	12

NOTE — The values specified for requirements (ii) to (vi) are on moisture-free basis.

*Methods of tests for animal feeds and feeding stuffs : Part I General methods.

5. PACKING AND MARKING

5.1 Packing — Unless agreed to between the purchaser and the vendor, the material shall be packed in clean and sound jute bags.

5.2 Marking — Each bag shall be indelibly and legibly marked to give the following information:

a) Name, type and grade of the material;
b) Name of the manufacturer;
c) Batch or code number;
d) Net mass in kg; and
e) Date of packing.

6. SAMPLING

6.1 Representative samples shall be drawn and conformity of the material in the lot to the requirements of this specification shall be determined according to the method prescribed in Appendix C of IS : 2052-1979*.

7. TESTS

7.1 Tests shall be carried out as prescribed in col 6 of Table 1.

7.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see* IS : 1070-1977†) shall be employed in tests.

Note — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

---

*Specification for compounded feeds for cattle (*third revision*).

†Specification for water for general laboratory use (*second revision*).

INDIAN STANDARDS

ON

OILCAKES AS LIVESTOCK FEED INGREDIENT

IS:	
1712-1982	Cottonseed oilcake as livestock feed ingredient (*second revision*)
1713-1970	Decorticated groundnut oilcake as livestock feed (*first revision*)
1932-1972	Mustard and rapeseed oilcake as livestock feed (*first revision*)
1935-1982	Linseed oilcake as livestock feed ingredient (*first revision*)
2151-1962	Maize germ oilcake
2154-1972	Coconut oilcake as livestock feed (*first revision*)
2503-1963	Decorticated safflower (*KARDI*) oilcake as livestock feed
3440-1966	Solvent extracted linseed oilcake (meal) as livestock feed
3441-1982	Solvent extracted groundnut oilcake (meal) as livestock feed ingredient (*first revision*)
3591-1968	Solvent extracted coconut oilcake (meal) as livestock feed (*first revision*)
3592-1968	Solvent extracted cottonseed oilcake (meal) as livestock feed (*first revision*)
3593-1979	Solvent extracted rice bran as livestock feed (*second revision*)
5862-1970	Solvent extracted nigerseed oilcake (meal) as livestock feed
6242-1971	Solvent extracted safflower oilcake as livestock feed
7059-1973	Solvent extracted sal seed meal for feeding livestock
7874	Methods of tests for animal feeds and feeding stuffs:
(Part I)-1975	Part I General methods
(Part II)-1975	Part II Minerals and trace elements
(Part III)-1975	Part III Microbiological methods

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	1 N = 1 kg.m/s^2
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m^2
Frequency	hertz	Hz	1 Hz = 1 c/s (s^{-1})
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m^2

INDIAN STANDARDS INSTITUTION
Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones : 26 60 21, 27 01 31 **Telegrams : Manaksanstha**

Regional Offices:

		Telephone
Western : Novelty Chambers, Grant Road	BOMBAY 400007	37 97 29
Eastern : 5 Chowringhee Approach	CALCUTTA 700072	27 50 90
Southern : C. I. T. Campus	MADRAS 600113	41 24 42
Northern : B69, Phase VII	S.A.S. NAGAR (MOHALI) 160051	—

Branch Offices:

'Pushpak', Nurmohamed Shaikh Marg, Khanpur	AHMADABAD 380001	2 03 91
'F' Block, Unity Bldg, Narasimharaja Square	BANGALORE 560002	22 48 05
Gangotri Complex, Bhadbhada Road, T.T. Nagar	BHOPAL 462003	6 27 16
22E Kalpana Area	BHUBANESHWAR 751014	5 36 27
5-8-56C L. N. Gupta Marg	HYDERABAD 500001	22 10 83
R 14 Yudhister Marg, C Scheme	JAIPUR 302005	6 98 32
117/418 B Sarvodaya Nagar	KANPUR 208005	4 72 92
Patliputra Industrial Estate	PATNA 800013	6 28 08
Hantex Bldg (2nd Floor), Rly Station Road	TRIVANDRUM 695001	32 27

Printed at Printograph, New Delhi, India